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Application No. 09 897, 158	Prepared by	NH	Tracking Number	05903949
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	JACKET										
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449								
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b								
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract								
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs								
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other								

SPECIFICATION	
	MESSAGE
a. Page Missing	Claims 3-4 (Originally claims 7 and 8,
b. Text Continuity	respectively) depends on claim 7 (originally
c. Holes through Data	claim 6. Blease Advise and correct claim
d. Other Missing Text	dependency.
e. Illegible Text	, , , , , , , , , , , , , , , , , , , ,
f. Duplicate Text	2 Claim 6 (now claim 7) depends on claim
g. Brief Description	11. Please Advise and correct claim dependency
h. Sequence Listing	
i. Appendix	
j. Amendments	
k. Other	
CLAIMS	
a. Claim(s) Missing	
b. Improper Dependency	Thankerou
c. Duplicate Numbers	
d. Incorrect Numbering	initials NH
e. Index Disagrees	RESPONSE
f. Punctuation	Δ
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k. Other	claims & dependences renumbered
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INDEX OF CLAIMS

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(Amended) A method of creating a hybridized chip combining a top active optical device chip, having a substrute including a first side and active device contacts on top active devices located on the first side, the top active optical devices also being on the first side, with an electronic chip having electronic chip contacts, when at least some of the active device contacts are not aligned with at least some of the electronic chip contacts when the top active optical

device chip and the electronic chip are superimposed, each of the at least some active device contacts having an electrically corresponding electronic chip contact, the method comprising: attaching a carrier to the top active optical device;

creating sidewalls defining openings in the substrate extending from the active device contacts on the first side through the substrate to a boltom side of the substrate opposite the first side at points on the bottom side substantially extincident with the active device contacts on the top side;

making the sidewalls electrically conductive to form electrically conductive paths from the active device contacts to the points; and

connecting the points to locations correspondingly aligned with the at least some electronic chip contacts with an electrically conductive material located on the boltom side of the active optical desire chip.

28 (Amended) The method of claim Afaither comprising:

removing the carrier after the connecting,

(Amended) The method of chain 4.4 m or wherein the connecting comprises:

parterning traces between the points and the localisms correspondingly aligned with the at least some electronic chip contacts, and

making the traces electrically conductive.

LAUNGER STILL WOLLSENGE

(Amended) The method of claims wherein the patterning traces comprises:

patterning at least some of the traces on the substrate and at least some other of the traces
on the electronic chip.

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% (Amended) The method of claims wherein the patterning traces further comprises:

patterning traces on the electronic chip.

H(Ansended) A method of creating a hybridized chip combining a top active optical device chip, having a substrate including a first side and active device contacts on top active devices located on the first side, the top active optical devices also being on the first side, with an electronic chip having electronic chip contacts, when at least some of the active device contacts

are not aligned with at least some of the electronic chip contacts when the top active optical device thip and the electronic chip are superimposed, each of the at least some active device contacts baving an electrically corresponding electronic chip contact, the method comprising:

thinning the substrate;

creating sidewalls defining openings in the substrate extending from the active device contacts on the first side through the substrate to a bottom side of the substrate opposite the first side at points on the bottom side substantially coincident with the active device contacts on the top side;

making the sidewalls electrically conductive to form electrically conductive paths from the active device contacts to the points; and

connecting the points to locations correspondingly aligned with the at least some electronic chip contacts with an electrically confuctive material located on the bottom side of the active optical device chip.

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(Amended) A method of creating a hybridized chip combining a top active optical device chip, having a substrate including a first side and active device contacts on top active devices located on the first side, the top active optical devices also being on the first side, with an electronic chip having electronic chip contacts, when at least some of the active device contacts are not sligned with at least some of the electronic chip contacts when the top active optical device chip and the electronic chip are superimposed, each of the at least some active device contacts having an electrically corresponding electronic chip contact, the method comprising:

attaching a cassior having a thickness greater than a minimum lasting thickness over the top active device;

causing sidewalls defining openings in the substrate extending from the active device contacts on the first side through the substrate to a bottom side of the substrate apposite the first side at points on the bottom side substantially coincident with the active device contacts on the top side;

making the sidewalls electrically conductive to form electrically conductive paths from the active device contacts to the points; and

connecting the points to locations correspondingly aligned with the at least some electronic chip contacts with an electrically conductive material located on the bottom side of the active optical device chip.

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Docket No. 4024-4021

The method of claim 16 further comprising:

patterning access ways in the carrier and applying an anti-reflection coating to the carrier.

(Amended) A hybridized chip comprising:

at least one son active optical device coupled to an electronic chip, the hybridized chip I-IG

having been created using the method of one of claims

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The method of claim fourther comprising:

thinning the substrate.

4

The method of claim Afurther comprising:

thinning the substrate.

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Docket No.: 4024-4021

The method of claim 45 20 or 24 further comprising attaching a carrier having a

thickness greater than a minimum lasing thickness over the top active device.

The method of claim A further comprising:

patterning access ways in the carrier and applying an anti-reflection coating to the carrier.

The method of claims further comprising attaching a carrier having a thickness greater than a minimum lasing thickness over the top active device.

The method of claim 36 further comprising:

patterning access ways in the carrier and applying an anti-reflection coating to the carrier.

1,2,10,13,14,3,4,11 12 AA, R. M. M. 20,21,24 of 25 wherein the making the The method of claim A. sidewalls electrically conductive comprises:

filling at least some of the openings with an electrically conductive material.

2 10, 13, 14, 3, 4, 11 /2 12 12 20 21, 24 or 25, wherein the making the The method of claim

sidewalls electrically conductive comprises:

depositing an electrically conductive material on at least some of the sidewalls.--